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Canada Centre for Mineral and Energy Technology | Centre canadien de la technologie des minéraux et de l'énergie

PROCESSING AND EVALUATION OF INTERLABORATORY ANALYTICAL RESULTS FOR THE CERTIFICATION OF ANTIMONY ORE CD-1 AS A REFERENCE MATERIAL

W.S. BOWMAN AND R. SUTARNO

PHYSICAL CHEMISTRY SECTION
PHYSICAL SCIENCES LABORATORY

OCTOBER 1977

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Project MRP-3.3.4.4.01
Reference Materials and Related Work

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Mineral Sciences Laboratories
Report MRP/MSL (CF)77-31(TR)

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by

W.S. Bowman and R. Sutarno

INTRODUCTION

An account of the characterization and certification of antimony ore CD-1 is being prepared as a CANMET report[1] for distribution with the bottles of material as they are issued to users. The present report, which is for internal use only, gives detailed records of the data processing and statistical treatments which were used for CD-1. Much of this information, due to confidentiality, is not included in the certification document.

PARTICIPATING LABORATORIES

Lab-1	Loring Laboratories Limited, Calgary, Alberta.
Lab-2	Sherritt Gordon Mines Limited, Research and Development Division, Fort Saskatchewan, Alberta.
Lab-3	Hudson Bay Mining and Smelting Company Limited, Flin Flon, Manitoba.
Lab-4	CANMET #2; Special Analyses Section, Mineral Sciences Laboratories, Ottawa, Ontario.
Lab-5	CANMET #3; Spectrochemistry Section, Mineral Sciences Laboratories, Ottawa, Ontario.

Lab-6 INCO Limited, Analytical Services, Process Technology, Copper Cliff, Ontario.

Lab-7 CANMET #5; Research and Reference Materials Section, Mineral Sciences Laboratories, Ottawa, Ontario.

Lab-8 Ministère des Richesses Naturelles, Centre de Recherches Minérales, Ste-Foy, Québec.

Lab-9 Bondar-Clegg and Company Limited, Ottawa, Ontario.

Lab-10 Geological Survey of Canada, Central Laboratories and Administrative Services, Ottawa, Ontario.

Lab-11 Cominco Limited, Trail, British Columbia.

Lab-12 Bondar-Clegg and Company Limited, Vancouver, British Columbia.

Lab-13 CANMET #4; Solution Chemistry Section, Mineral Sciences Laboratories, Ottawa, Ontario.

Lab-14 Thunder Bay Testing Limited, Thunder Bay, Ontario.

Lab-15 CANMET #1; Ores and Fire Assay Section, Mineral Sciences Laboratories, Ottawa, Ontario.

Lab-16 Ministry of Natural Resources, Mineral Research Branch, Toronto, Ontario.

Lab-17 Lakefield Research of Canada Limited, Lakefield, Ontario.

Lab-18 CANMET #6; Research and Reference Materials Section, Mineral Sciences Laboratories, Ottawa, Ontario.

Lab-19 Chemex Labs Limited, North Vancouver, British Columbia

Lab-20 X-ray Assay Laboratories Limited, Don Mills, Ontario

DATA PROCESSING

The analytical results submitted by the participating laboratories were processed on the EMR CYBER 74 computer using a CDC feature called UPDATE[2,3]. This feature allows easy addition or deletion of results as the certification program progresses. A series of disk files were used to store the data on CD-1 while the program was current. Now, the only copy, which will

be retained, resides in the EMR tape library. The following information is required to access the tape for CD-1:

VSN = ER4945

L = CD1

D = PE (9 track)

A printout of the UPDATE compile file is given in the Appendix.

OUTLIERS

The analytical results reported by the participating laboratories are listed in Table 1(a) and 1(b) and are plotted in Figure 1. Sets of results whose means differ by more than twice the standard deviation from the overall mean were considered to be possible outliers and were not used in the calculation of consensus values and their confidence limits. These outliers are noted in Table 1 and circled in Figure 1. The UPDATE correction set required to temporarily delete these sets is given below:

```
*IDENT STAT
*DELETE MOD2.50, MOD2.73          antimony lab-12(a.a.) + (vol.)
*DELETE MOD2.182, 182, 193        arsenic  lab-14(vol.)
```

HOMOGENEITY

Tables 2(a) and 2(b) give the means, coefficients of variation, and summary of the t-test between bottles at the 5% significance level for all results for CD-1. The same information is shown graphically in Figures 2(a) and 2(b)

in which, for each set, the difference between the means of the bottles is plotted against the corresponding mean of the results for both bottles. The vertical bar represents the 95% confidence interval of the former. If a bar intersects the abscissa, the null hypothesis that there is no difference between bottle means is accepted. It can be seen from Table 2 and Figure 2 that the null hypothesis is rejected for 5 of 23 sets for antimony and 4 of 23 sets for arsenic. The homogeneity of CD-1 was further examined by analysis of variance.

ANALYSIS OF VARIANCE

A two-way ANOVA with nested design[4] was used. All data except the outliers noted above could be used since all participants submitted the correct number of results. Details of the model and general ANOVA table are given in the CANMET report[1]. The ANOVA tables for antimony and arsenic in CD-1 are given in Tables 3(a) and 3(b) respectively. The estimates of between-set, between-bottle, and within-bottle standard deviations are given as PSI, OMEGA, and SIGMA, respectively. It can be seen that the F-ratio of between-bottles mean square to within-bottles mean square for antimony is greater than the critical value for the F-distribution at 95% probability. For arsenic, the F-ratio is less than the critical value.

It can be concluded that bottle to bottle differences are insignificant with respect to arsenic, and significant but trivial in the case of antimony.

The overall means and their 95% confidence limits can also be obtained from the two-way ANOVA computations. These statistics and others are presented in Table 4. The certification factors for antimony and arsenic are both less than the critical value of 4 [5]. Hence, the overall means are accepted as recommended values.

REFERENCES

1. Faye, G.H., Bowman, W.S. and Sutarno, R., Antimony ore CD-1: a certified reference material; CANMET report 77-63.

2. Control Data Cyber 70 UPDATE Reference Manual, Control Data Corporation Publication No. 60449900.

3. Bowman, W.S., The use of UPDATE to process data files; Mineral Sciences Laboratories report MRP/MSL 75-176 (TR).

4. Brownlee, K.A., Statistical theory and methodology in sciences. John Wiley and Sons, Inc.; New York; 1961.

5. Sutarno, R. and Faye, G.H., A measure for assessing certified reference materials; Talanta; v. 22, pp 676-681; 1975

Table B(a)

Antimony results for CD-1

ANTIMONY (WEIGHT PERCENT)

											SAMPLE WT. G
LAB- 1 (A.A.)	3.640	3.570	3.640	3.590	3.640	3.590	3.570	3.640	3.640	3.640	0.5
LAB- 2 (A.A.)	3.600	3.630	3.560	3.510	3.490	3.560	3.600	3.530	3.560	3.550	0.1-0.5
LAB- 3 (A.A.)	3.740	3.740	3.760	3.720	3.700	3.680	3.670	3.680	3.660	3.630	0.5
LAB- 4 (POLAR.)	3.580	3.620	3.610	3.600	3.580	3.600	3.660	3.590	3.660	3.740	0.25
LAB- 5 (XRF)	3.520	3.520	3.510	3.470	3.520	3.570	3.520	3.570	3.610	3.510	0.5
LAB- 6 (A.A.)	3.590	3.620	3.580	3.540	3.570	3.670	3.620	3.630	3.570	3.610	0.2-0.4
LAB- 8 (A.A.)	3.560	3.560	3.540	3.560	3.540	3.560	3.580	3.560	3.560	3.560	0.5
LAB- 9 (A.A.)	3.410	3.400	3.420	3.410	3.420	3.430	3.410	3.430	3.410	3.450	1.0
LAB-10 (A.A.)	3.600	3.450	3.520	3.480	3.560	3.520	3.600	3.590	3.470	3.530	0.1
LAB-11 (VOL.)	3.390	3.420	3.420	3.450	3.420	3.420	3.420	3.390	3.450	3.420	1.0
LAB-11 (VOL.)	3.540	3.510	3.520	3.480	3.510	3.540	3.510	3.490	3.490	3.510	2.0
* LAB-12 (A.A.)	3.300	3.350	3.300	3.300	3.350	3.320	3.360	3.350	3.320	3.350	0.25
* LAB-12 (VOL.)	3.310	3 400	3.340	3.310	3.250	3.260	3.260	3.340	3.340	3.310	1.0
LAB-13 (A.A.)	3.590	3.590	3.600	3.630	3.550	3.620	3.630	3.660	3.670	3.620	1.0
LAB-14 (VOL.)	3.400	3.470	3.530	3.430	3.450	3.480	3.510	3.480	3.440	3.410	1.0
LAB-15 (A.A.)	3.590	3.620	3.650	3.600	3.580	3.550	3.520	3.530	3.530	3.580	0.5
LAB-16 (A.A.)	3.720	3.760	3.720	3.720	3.690	3.720	3.680	3.640	3.720	3.680	0.1
LAB-17 (A.A.)	3.570	3.590	3.590	3.590	3.590	3.590	3.590	3.580	3.570	3.580	1.0
LAB-18 (A.A.-1)	3.580	3.640	3.640	3.600	3.600	3.600	3.640	3.600	3.600	3.600	0.5
LAB-18 (A.A.-2)	3.580	3.600	3.600	3.600	3.600	3.600	3.600	3.620	3.620	3.620	0.5
LAB-18 (COLOR.)	3.630	3.630	3.590	3.610	3.610	3.650	3.610	3.640	3.610	3.590	0.5
LAB-19 (A.A.)	3.520	3.526	3.506	3.518	3.485	3.512	3.513	3.476	3.479	3.488	0.5
LAB-20 (XRF)	3.590	3.520	3.650	3.640	3.580	3.670	3.550	3.620	3.620	3.620	0.2

* possible outliers

Table I(b)

Arsenic results for CD-1

ARSENIC (WEIGHT PERCENT)

											SAMPLE WT. G
LAB- 1 (VOL.)	.650	.670	.670	.670	.670	.670	.670	.670	.670	.670	1.0
LAB- 2 (COLOR.)	.633	.633	.631	.619	.618	.636	.642	.634	.613	.636	0.5-1.5
LAB- 3 (A.A.)	.640	.640	.660	.640	.660	.660	.640	.660	.660	.660	0.5
LAB- 3 (VOL.)	.610	.690	.670	.710	.710	.650	.710	.740	.710	.710	2.0
LAB- 4 (POLAR.)	.610	.600	.609	.619	.633	.608	.598	.598	.596	.572	0.25
LAB- 4 (AMP.)	.628	.639	.628	.645	.645	.639	.636	.635	.644	.644	0.25
LAB- 5 (XRF)	.597	.613	.614	.598	.614	.624	.608	.604	.598	.600	5 *
LAB- 6 (COLOR.)	.676	.690	.693	.667	.669	.664	.666	.697	.689	.665	0.5-2.0
LAB- 7 (COLOR.)	.687	.690	.682	.685	.685	.682	.680	.682	.680	.682	0.2
LAB- 8 (VOL.)	.630	.630	.630	.650	.620	.620	.630	.640	.630	.650	1.0
LAB- 9 (VOL.)	.652	.674	.654	.646	.671	.654	.653	.656	.665	.675	2.0
LAB-10 (A.A.)	.620	.590	.610	.560	.590	.560	.620	.610	.570	.590	0.1
LAB-11 (VOL.)	.690	.690	.700	.680	.690	.700	.690	.680	.700	.680	1.0
LAB-11 (VOL.)	.710	.710	.700	.700	.700	.700	.700	.690	.700	.700	1.0
LAB-12 (VOL.)	.663	.656	.663	.655	.672	.670	.664	.672	.679	.679	0.5
LAB-13 (VOL.)	.705	.696	.694	.688	.696	.703	.699	.697	.702	.699	2.5
** LAB-14 (VOL.)	.561	.578	.566	.572	.564	.572	.568	.560	.577	.567	1.0
LAB-15 (VOL.)	.697	.736	.736	.736	.697	.697	.736	.736	.697	.736	0.5
LAB-15 (COLOR.)	.673	.655	.655	.663	.650	.660	.655	.650	.678	.655	1.0
LAB-16 (COLOR.)	.710	.660	.630	.660	.650	.680	.700	.650	.690	.700	0.1
LAB-17 (VOL.)	.694	.686	.692	.690	.686	.692	.688	.694	.690	.690	0.5
LAB-19 (VOL.)	.693	.701	.683	.687	.667	.705	.695	.700	.699	.702	2.0
LAB-20 (XRF)	.650	.660	.660	.650	.670	.650	.650	.650	.650	.650	8 *

*sample pelletized

** possible outlier

Table 2 (a)

Laboratory means, coefficients of variation, and summary of *t*-test on between-bottle antimony results for CD-1

		BOTTLE 1			BOTTLE 2			NULL HYPOTH.	OVERALL			
		N	MEAN	ST.DEV.	N	MEAN	ST.DEV.		N	MEAN	ST.DEV.	C.V.(%)
LAB- 1	(A.A.)	5	3.6160	.0336	5	3.6160	.0336	A	10	3.6160	.0317	.88
LAB- 2	(A.A.)	5	3.5580	.0589	5	3.5600	.0255	A	10	3.5590	.0428	1.20
LAB- 3	(A.A.)	5	3.7320	.0228	5	3.6640	.0207	REJECT	10	3.6980	.0413	1.12
LAB- 4	(POLAR.)	5	3.5980	.0179	5	3.6500	.0600	A	10	3.6240	.0499	1.38
LAB- 5	(XRF)	5	3.5080	.0217	5	3.5560	.0410	REJECT	10	3.5320	.0399	1.13
LAB- 6	(A.A.)	5	3.5800	.0292	5	3.6200	.0361	A	10	3.6000	.0374	1.04
LAB- 8	(A.A.)	5	3.5520	.0110	5	3.5640	.0089	A	10	3.5580	.0114	.32
LAB- 9	(A.A.)	5	3.4120	.0084	5	3.4260	.0167	A	10	3.4190	.0145	.42
LAB-10	(A.A.)	5	3.5220	.0602	5	3.5420	.0536	A	10	3.5320	.0547	1.55
LAB-11	(VOL.)	5	3.4200	.0212	5	3.4200	.0212	A	10	3.4200	.0200	.58
LAB-11	(VOL.)	5	3.5120	.0217	5	3.5080	.0205	A	10	3.5100	.0200	.57
LAB-12	(A.A.)	5	3.3200	.0274	5	3.3400	.0187	A	10	3.3300*	.0245	.74
LAB-12	(VOL.)	5	3.3220	.0545	5	3.3020	.0402	A	10	3.3120*	.0464	1.40
LAB-13	(A.A.)	5	3.5920	.0286	5	3.6400	.0235	REJECT	10	3.6160	.0353	.98
LAB-14	(VOL.)	5	3.4560	.0488	5	3.4640	.0391	A	10	3.4600	.0419	1.21
LAB-15	(A.A.)	5	3.6080	.0277	5	3.5420	.0239	REJECT	10	3.5750	.0425	1.19
LAB-16	(A.A.)	5	3.7220	.0249	5	3.6880	.0335	A	10	3.7050	.0331	.89
LAB-17	(A.A.)	5	3.5860	.0089	5	3.5820	.0084	A	10	3.5840	.0084	.24
LAB-18	(A.A.-1)	5	3.6120	.0268	5	3.6080	.0179	A	10	3.6100	.0216	.60
LAB-18	(A.A.-2)	5	3.5960	.0089	5	3.6120	.0110	REJECT	10	3.6040	.0126	.35
LAB-18	(COLOR.)	5	3.6140	.0167	5	3.6200	.0245	A	10	3.6170	.0200	.55
LAB-19	(A.A.)	5	3.5110	.0162	5	3.4936	.0178	A	10	3.5023	.0185	.53
LAB-20	(XRF)	5	3.5960	.0522	5	3.6160	.0428	A	10	3.6060	.0462	1.28
								TOTAL	230	3.5474	.1053	2.97

* outside two-sigma limits of 3.3367 to 3.7580, not used in computations.

Table 2 (b)

Laboratory means, coefficients of variation and summary of *t*-test on between-bottle arsenic results for CD-1

		BOTTLE 1			BOTTLE 2			NULL HYPOTH.	OVERALL			
		N	MEAN	ST.DEV.	N	MEAN	ST.DEV.		N	MEAN	ST.DEV.	C.V.(%)
LAB- 1	(VOL.)	5	.6660	.0089	5	.6700	0.0000	A	10	.6680	.0063	.95
LAB- 2	(COLOR.)	5	.6268	.0076	5	.6322	.0111	A	10	.6295	.0094	1.50
LAB- 3	(A.A.)	5	.6480	.0110	5	.6560	.0089	A	10	.6520	.0103	1.58
LAB- 3	(VOL.)	5	.6780	.0415	5	.7040	.0329	A	10	.6910	.0378	5.48
LAB- 4	(POLAR.)	5	.6142	.0125	5	.5944	.0134	REJECT	10	.6043	.0160	2.66
LAB- 4	(AMP.)	5	.6370	.0086	5	.6396	.0043	A	10	.6383	.0065	1.02
LAB- 5	(XRF)	5	.6072	.0089	5	.6068	.0104	A	10	.6070	.0091	1.50
LAB- 6	(COLOR.)	5	.6790	.0119	5	.6762	.0156	A	10	.6776	.0132	1.95
LAB- 7	(COLOR.)	5	.6858	.0029	5	.6812	.0011	REJECT	10	.6835	.0032	.47
LAB- 8	(VOL.)	5	.6320	.0110	5	.6340	.0114	A	10	.6330	.0106	1.67
LAB- 9	(VOL.)	5	.6594	.0124	5	.6606	.0093	A	10	.6600	.0103	1.57
LAB-10	(A.A.)	5	.5940	.0230	5	.5900	.0255	A	10	.5920	.0230	3.88
LAB-11	(VOL.)	5	.6900	.0071	5	.6900	.0100	A	10	.6900	.0082	1.18
LAB-11	(VOL.)	5	.7040	.0055	5	.6980	.0045	A	10	.7010	.0057	.81
LAB-12	(VOL.)	5	.6618	.0068	5	.6768	.0057	REJECT	10	.6693	.0099	1.48
LAB-13	(VOL.)	5	.6958	.0061	5	.7000	.0024	A	10	.6979	.0049	.70
LAB-14	(VOL.)	5	.5682	.0068	5	.5688	.0063	A	10	.5685 *	.0062	1.09
LAB-15	(VOL.)	5	.7204	.0214	5	.7204	.0214	A	10	.7204	.0201	2.80
LAB-15	(COLOR.)	5	.6592	.0090	5	.6596	.0109	A	10	.6594	.0094	1.43
LAB-16	(COLOR.)	5	.6620	.0295	5	.6840	.0207	A	10	.6730	.0267	3.97
LAB-17	(VOL.)	5	.6896	.0036	5	.6908	.0023	A	10	.6902	.0029	.42
LAB-19	(VOL.)	5	.6862	.0127	5	.7002	.0037	REJECT	10	.6932	.0115	1.66
LAB-20	(XRF)	5	.6580	.0084	5	.6500	.0000	A	10	.6540	.0070	1.07
								TOTAL	230	.6588	.0403	6.11

* outside two-sigma limits of 0.5783 to 0.7393, not used in computations.

Table 3(a)

STANDARD REFERENCE MATERIAL CD-1, ANTIMONY

ANALYSIS OF VARIANCE TABLE

SOURCE OF VARIATION	D.F.	SUM OF SQUARES	MEAN SQUARE	F-RATIO	F-TABLE *
BETWEEN SETS	20	.11785175E+01	.58925876E-01	23.685	2.096
BETWEEN BOTTLES	21	.52246900E-01	.24879476E-02	2.603	1.619
BETWEEN REPLICATES	168	.16060520E+00	.95598333E-03		
TOTAL	209	.13913696E+01			

PSI = .75125181E-01

OMEGA = .17504081E-01

SIGMA = .30918980E-01

GRAND MEAN = 3.5689

* 95% probability

Table 3(b)

STANDARD REFERENCE MATERIAL CD-1, ARSENIC

ANALYSIS OF VARIANCE TABLE

SOURCE OF VARIATION	D.F.	SUM OF SQUARES	MEAN SQUARE	F-RATIO	F-TABLE *
BETWEEN SETS	21	.24398651E+00	.11618405E-01	45.264	2.059
BETWEEN BOTTLES	22	.56470000E-02	.25668182E-03	1.264	1.603
BETWEEN REPLICATES	176	.35753600E-01	.20314545E-03		
TOTAL	219	.28538711E+00			

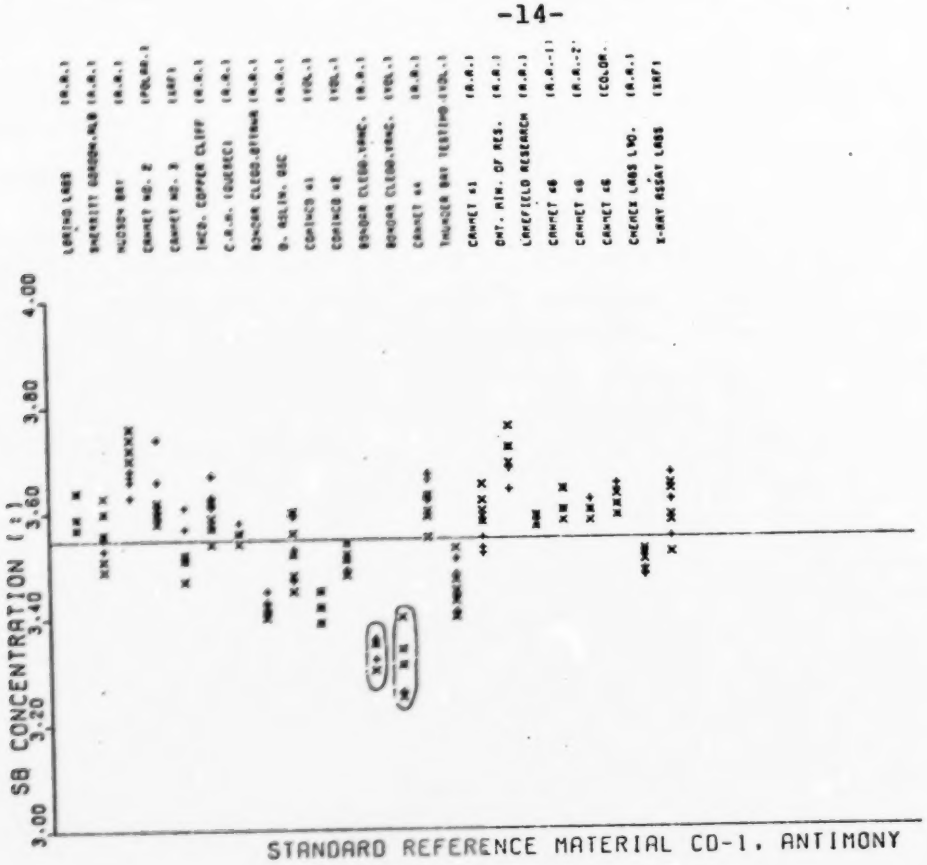
PSI	=	.33707156E-01
OMEGA	=	.32721969E-02
SIGMA	=	.14252910E-01
GRAND MEAN	=	.6629

* 95% probability

Table 4

Statistics for CD-1 (after rejection of outliers)

Element	NLAB	NSET	N	MEDIAN	MEAN	95% CONF. LIMITS LOW	HIGH	SPREAD(%)	$\overline{CV}$	CF	$V[\bar{x}]$	α_3	α_4
Antimony	18	21	210	3.580	3.569	3.534	3.604	1.96	0.86	2.3	$\cdot 2806 \times 10^{-3}$	-0.2	2.7
Arsenic	18	22	220	0.667	0.663	0.648	0.678	4.56	1.81	2.5	$\cdot 5281 \times 10^{-4}$	-0.4	2.8



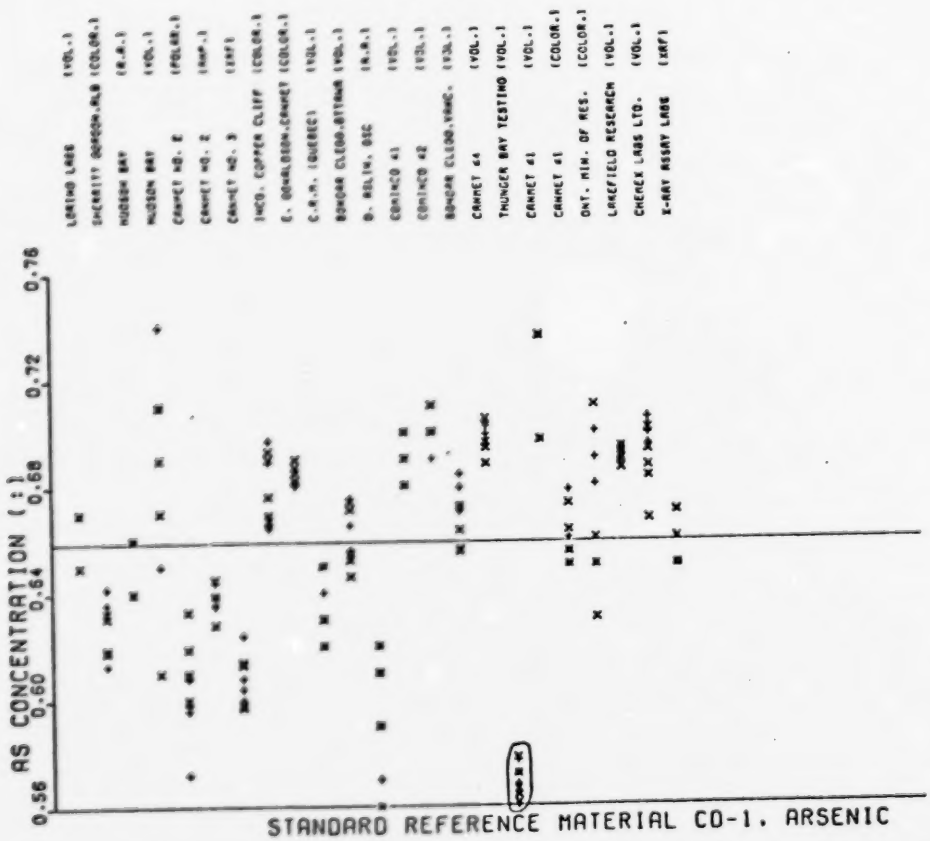


Figure 1. Graphical presentation of analytical results.

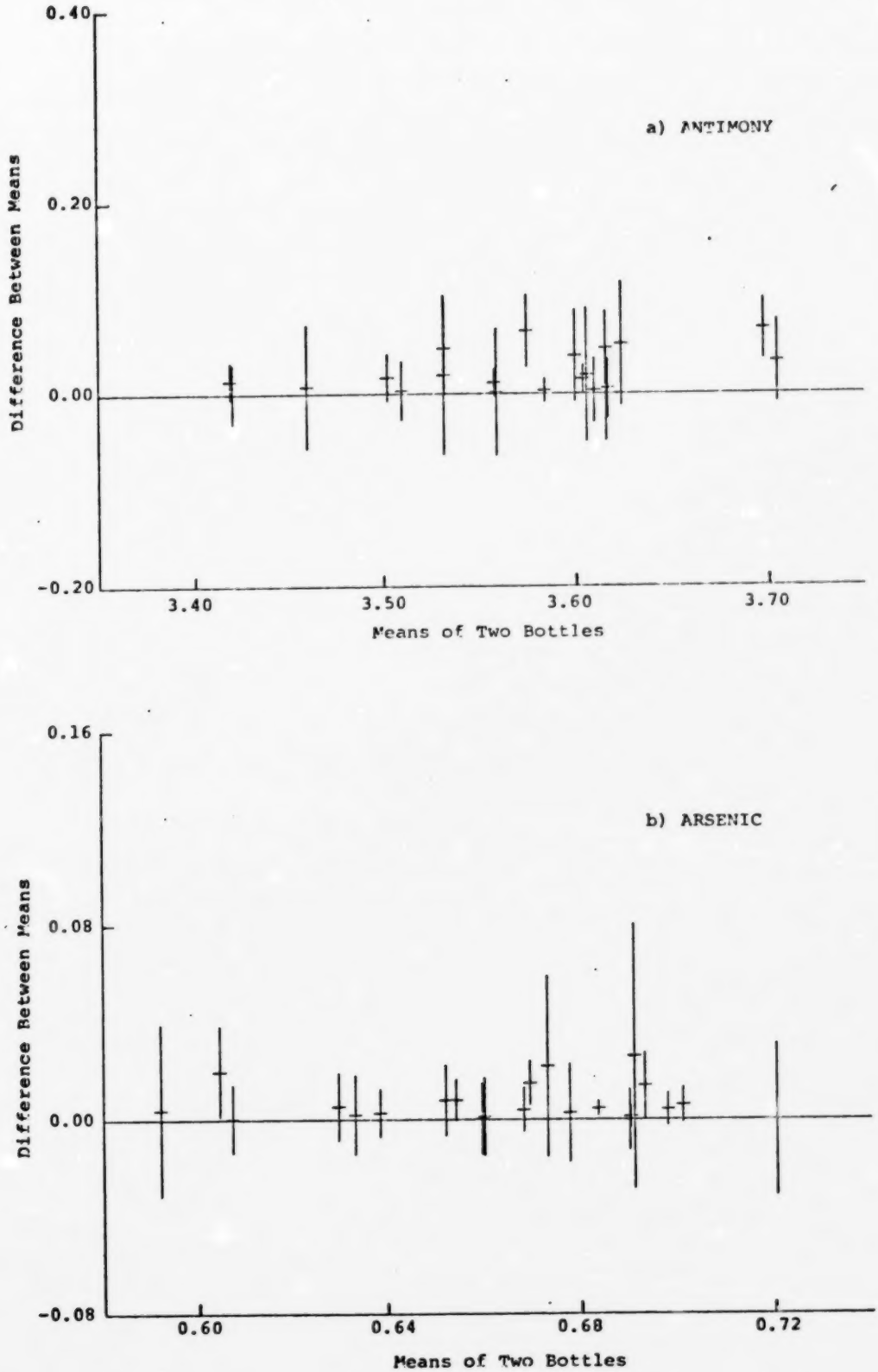


Figure 2. Illustration of degree of homogeneity.

CD1 MODIFICATIONS / CONTROL CARDS UPDATE 1.2-75350. 27/09/77 09.13.02.

CORRECTION IDENTS ARE LISTED IN CHRONOLOGICAL ORDER OF INSERTION

SH AS MOD1 MOD2 MOD3 MOD4

DECKS ARE LISTED IN THE ORDER OF THEIR OCCURRENCE ON A NEW PROGRAM LIBRARY IF ONE IS CREATED BY THIS UPDATE

YANCESS SP AS

DECKS WRITTEN TO COMPILE FILE

SP AS

THIS UPDATE REQUIRED 305008 WORDS OF CORE.

STANDARD REFERENCE MATERIAL CD-1, ANTIMONY

SR CONCENTRATION (%)							
LAB- 1 LORING LABS						SA	2
						SB	3
3.64	LORING LABS	CD-1	ANTIMONY	(A.A.)	B-504	SA	4
3.57	LORING LABS	CD-1	ANTIMONY	(A.A.)	B-504	SB	5
3.64	LORING LABS	CD-1	ANTIMONY	(A.A.)	B-504	SA	6
3.59	LORING LABS	CD-1	ANTIMONY	(A.A.)	B-504	SB	7
3.64	LORING LABS	CD-1	ANTIMONY	(A.A.)	B-504	SA	8
3.59	LORING LABS	CD-1	ANTIMONY	(A.A.)	B-1024	SB	9
3.57	LORING LABS	CD-1	ANTIMONY	(A.A.)	B-1024	SA	10
3.64	LORING LABS	CD-1	ANTIMONY	(A.A.)	B-1024	SB	11
3.64	LORING LABS	CD-1	ANTIMONY	(A.A.)	B-1024	SA	12
3.64	LORING LABS	CD-1	ANTIMONY	(A.A.)	B-1024	SB	13
1						SA	14
						SB	15
LAB- 2 SHERRITT GORDON, FORT SASKATCHEWAN, ALBERTA						SA	16
3.60	SHERRITT GORDON,ALB	CD-1	ANTIMONY	(A.A.)	B-807	MOD1	1
3.62	SHERRITT GORDON,ALB	CD-1	ANTIMONY	(A.A.)	B-807	MOD1	2
3.56	SHERRITT GORDON,ALB	CD-1	ANTIMONY	(A.A.)	B-807	MOD1	3
3.61	SHERRITT GORDON,ALB	CD-1	ANTIMONY	(A.A.)	B-807	MOD1	4
3.49	SHERRITT GORDON,ALB	CD-1	ANTIMONY	(A.A.)	B-807	MOD1	5
3.56	SHERRITT GORDON,ALB	CD-1	ANTIMONY	(A.A.)	B-1025	MOD1	6
3.60	SHERRITT GORDON,ALB	CD-1	ANTIMONY	(A.A.)	B-1025	MOD1	7
3.52	SHERRITT GORDON,ALB	CD-1	ANTIMONY	(A.A.)	B-1025	MOD1	8
3.54	SHERRITT GORDON,ALB	CD-1	ANTIMONY	(A.A.)	B-1025	MOD1	9
3.55	SHERRITT GORDON,ALB	CD-1	ANTIMONY	(A.A.)	B-1025	MOD1	10
1						SA	27
						SB	28
LAB- 3 HUDSON BAY MINING AND SMELTING						SA	29
3.74	HUDSON BAY	CD-1	ANTIMONY	(A.A.)	B-222	SB	30
3.74	HUDSON BAY	CD-1	ANTIMONY	(A.A.)	B-222	SA	31
3.76	HUDSON BAY	CD-1	ANTIMONY	(A.A.)	B-222	SB	32
3.72	HUDSON BAY	CD-1	ANTIMONY	(A.A.)	B-222	SA	33
3.70	HUDSON BAY	CD-1	ANTIMONY	(A.A.)	B-222	SB	34
3.69	HUDSON BAY	CD-1	ANTIMONY	(A.A.)	B-381	SA	35
3.67	HUDSON BAY	CD-1	ANTIMONY	(A.A.)	B-381	SB	36
3.68	HUDSON BAY	CD-1	ANTIMONY	(A.A.)	B-381	SA	37
3.69	HUDSON BAY	CD-1	ANTIMONY	(A.A.)	B-381	SB	38
3.67	HUDSON BAY	CD-1	ANTIMONY	(A.A.)	B-381	SA	39
1						SB	40
LAB- 4 CANMET #2 (C.A. SMITH)						SA	41
3.58	CANMET NO. 2	CD-1	ANTIMONY	(POLAR.)	B-394	SB	42
3.62	CANMET NO. 2	CD-1	ANTIMONY	(POLAR.)	B-394	SA	43
3.61	CANMET NO. 2	CD-1	ANTIMONY	(POLAR.)	B-394	SB	44
3.60	CANMET NO. 2	CD-1	ANTIMONY	(POLAR.)	B-394	SA	45
3.58	CANMET NO. 2	CD-1	ANTIMONY	(POLAR.)	B-394	SB	46
3.60	CANMET NO. 2	CD-1	ANTIMONY	(POLAR.)	B-959	SA	47
3.66	CANMET NO. 2	CD-1	ANTIMONY	(POLAR.)	B-959	SB	48
3.59	CANMET NO. 2	CD-1	ANTIMONY	(POLAR.)	B-959	SA	49
3.66	CANMET NO. 2	CD-1	ANTIMONY	(POLAR.)	B-959	SB	50
3.74	CANMET NO. 2	CD-1	ANTIMONY	(POLAR.)	B-959	SA	51
1						SB	52
LAB- 5 CANMET #3 (SPECTROCHEMISTRY)						SA	53
3.52	CANMET NO. 3	CD-1	ANTIMONY	(XRF)	B-927	SB	54
3.52	CANMET NO. 3	CD-1	ANTIMONY	(XRF)	B-927	SA	55
3.51	CANMET NO. 3	CD-1	ANTIMONY	(XRF)	B-927	SB	56
3.47	CANMET NO. 3	CD-1	ANTIMONY	(XRF)	B-927	SA	57
3.52	CANMET NO. 3	CD-1	ANTIMONY	(XRF)	B-927	SB	58
3.57	CANMET NO. 3	CD-1	ANTIMONY	(XRF)	B-1029	SA	59
3.59	CANMET NO. 3	CD-1	ANTIMONY	(XRF)	B-1029	SB	60
3.57	CANMET NO. 3	CD-1	ANTIMONY	(XRF)	B-1029	SA	61
3.61	CANMET NO. 3	CD-1	ANTIMONY	(XRF)	B-1029	SB	62
3.61	CANMET NO. 3	CD-1	ANTIMONY	(XRF)	B-1029	SA	63
1						SB	64

3.59	INCO. COPPER CLIFF	CD-1	ANTIMONY	(A.A.)	B-63	SB	65	
3.49	INCO. COPPER CLIFF	CD-1	ANTIMONY	(A.A.)	B-63	SB	66	
3.53	INCO. COPPER CLIFF	CD-1	ANTIMONY	(A.A.)	B-63	SB	67	
3.54	INCO. COPPER CLIFF	CD-1	ANTIMONY	(A.A.)	B-63	SB	68	
3.57	INCO. COPPER CLIFF	CD-1	ANTIMONY	(A.A.)	B-63	SB	69	
3.67	INCO. COPPER CLIFF	CD-1	ANTIMONY	(A.A.)	B-577	SB	70	
3.62	INCO. COPPER CLIFF	CD-1	ANTIMONY	(A.A.)	B-577	SB	71	
3.63	INCO. COPPER CLIFF	CD-1	ANTIMONY	(A.A.)	B-577	SB	72	
3.57	INCO. COPPER CLIFF	CD-1	ANTIMONY	(A.A.)	B-577	SB	73	
3.61	INCO. COPPER CLIFF	CD-1	ANTIMONY	(A.A.)	B-577	SB	74	
	1							
LAB- B CENTRE DE RECHERCHES MINERALES (QUEBEC)						MOD1	11	
						MOD1	12	
3.56	C.R.M. (QUEBEC)	CD-1	ANTIMONY	(A.A.)	B-532	MOD1	13	
3.44	C.R.M. (QUEBEC)	CD-1	ANTIMONY	(A.A.)	B-532	MOD1	14	
3.54	C.R.M. (QUEBEC)	CD-1	ANTIMONY	(A.A.)	B-532	MOD1	15	
3.56	C.R.M. (QUEBEC)	CD-1	ANTIMONY	(A.A.)	B-532	MOD1	16	
3.54	C.R.M. (QUEBEC)	CD-1	ANTIMONY	(A.A.)	B-532	MOD1	17	
3.55	C.R.M. (QUEBEC)	CD-1	ANTIMONY	(A.A.)	B-585	MOD1	18	
3.58	C.R.M. (QUEBEC)	CD-1	ANTIMONY	(A.A.)	B-585	MOD1	19	
3.56	C.R.M. (QUEBEC)	CD-1	ANTIMONY	(A.A.)	B-585	MOD1	20	
3.54	C.R.M. (QUEBEC)	CD-1	ANTIMONY	(A.A.)	B-585	MOD1	21	
3.56	C.R.M. (QUEBEC)	CD-1	ANTIMONY	(A.A.)	B-585	MOD1	22	
	1					MOD2	1	
LAB- 9 BONDAR CLEGG. OTTAWA						MOD2	2	
3.41	BONDAR CLEGG.OTTAWA	CD-1	ANTIMONY	(A.A.)	B-365	MOD2	3	
3.40	BONDAR CLEGG.OTTAWA	CD-1	ANTIMONY	(A.A.)	B-365	MOD2	4	
3.42	BONDAR CLEGG.OTTAWA	CD-1	ANTIMONY	(A.A.)	B-365	MOD2	5	
3.41	BONDAR CLEGG.OTTAWA	CD-1	ANTIMONY	(A.A.)	B-365	MOD2	6	
3.42	BONDAR CLEGG.OTTAWA	CD-1	ANTIMONY	(A.A.)	B-365	MOD2	7	
3.43	BONDAR CLEGG.OTTAWA	CD-1	ANTIMONY	(A.A.)	B-1262	MOD2	8	
3.41	BONDAR CLEGG.OTTAWA	CD-1	ANTIMONY	(A.A.)	B-1262	MOD2	9	
3.43	BONDAR CLEGG.OTTAWA	CD-1	ANTIMONY	(A.A.)	B-1262	MOD2	10	
3.41	BONDAR CLEGG.OTTAWA	CD-1	ANTIMONY	(A.A.)	B-1262	MOD2	11	
3.45	BONDAR CLEGG.OTTAWA	CD-1	ANTIMONY	(A.A.)	B-1262	MOD2	12	
	1					MOD2	13	
LAB-10 G.E.N. ASLIN. QSC						MOD2	14	
3.50	G. ASLIN. QSC	CD-1	ANTIMONY	(A.A.)	B-758	MOD2	15	
3.43	G. ASLIN. QSC	CD-1	ANTIMONY	(A.A.)	B-758	MOD2	16	
3.52	G. ASLIN. QSC	CD-1	ANTIMONY	(A.A.)	B-758	MOD2	17	
3.48	G. ASLIN. QSC	CD-1	ANTIMONY	(A.A.)	B-758	MOD2	18	
3.56	G. ASLIN. QSC	CD-1	ANTIMONY	(A.A.)	B-758	MOD2	19	
3.52	G. ASLIN. QSC	CD-1	ANTIMONY	(A.A.)	B-1005	MOD2	20	
3.49	G. ASLIN. QSC	CD-1	ANTIMONY	(A.A.)	B-1005	MOD2	21	
3.51	G. ASLIN. QSC	CD-1	ANTIMONY	(A.A.)	B-1005	MOD2	22	
3.47	G. ASLIN. QSC	CD-1	ANTIMONY	(A.A.)	B-1005	MOD2	23	
3.52	G. ASLIN. QSC	CD-1	ANTIMONY	(A.A.)	B-1005	MOD2	24	
	1					MOD2	25	
LAB-11 COMINCO #1						MOD2	26	
3.39	COMINCO #1	CD-1	ANTIMONY	(VOL.)	B-210	MOD2	27	
3.42	COMINCO #1	CD-1	ANTIMONY	(VOL.)	B-210	MOD2	28	
3.42	COMINCO #1	CD-1	ANTIMONY	(VOL.)	B-210	MOD2	29	
3.45	COMINCO #1	CD-1	ANTIMONY	(VOL.)	B-210	MOD2	30	
3.42	COMINCO #1	CD-1	ANTIMONY	(VOL.)	B-210	MOD2	31	
3.42	COMINCO #1	CD-1	ANTIMONY	(VOL.)	B-1109	MOD2	32	
3.42	COMINCO #1	CD-1	ANTIMONY	(VOL.)	B-1109	MOD2	33	
3.39	COMINCO #1	CD-1	ANTIMONY	(VOL.)	B-1109	MOD2	34	
3.45	COMINCO #1	CD-1	ANTIMONY	(VOL.)	B-1109	MOD2	35	
3.42	COMINCO #1	CD-1	ANTIMONY	(VOL.)	B-1109	MOD2	36	
						MOD2	37	
LAB-11 COMINCO #2						MOD2	38	
3.50	COMINCO #2	CD-1	ANTIMONY	(VOL.)	B-210	MOD2	39	
3.51	COMINCO #2	CD-1	ANTIMONY	(VOL.)	B-210	MOD2	40	
3.59	COMINCO #2	CD-1	ANTIMONY	(VOL.)	B-210	MOD2	41	
3.48	COMINCO #2	CD-1	ANTIMONY	(VOL.)	B-210	MOD2	42	
3.41	COMINCO #2	CD-1	ANTIMONY	(VOL.)	B-210	MOD2	43	

3.41	[illegible]	CD-1	[illegible]	[illegible]	[illegible]	MOD2	[illegible]
3.44	COMINCO #2	CD-1	ANTIMONY	(VOL.)	B-1109	MOD2	46
3.48	COMINCO #2	CD-1	ANTIMONY	(VOL.)	B-1109	MOD2	47
3.51	COMINCO #2	CD-1	ANTIMONY	(VOL.)	B-1109	MOD2	48
	1					MOD2	49
LAB-12	BONDAR CLEGG, VANCOUVER					MOD2	50
3.30	BONDAR CLEGG.VANC.	CD-1	ANTIMONY	(A.A.)	B-57	MOD2	51
3.35	BONDAR CLEGG.VANC.	CD-1	ANTIMONY	(A.A.)	B-57	MOD2	52
3.29	BONDAR CLEGG.VANC.	CD-1	ANTIMONY	(A.A.)	B-57	MOD2	53
3.31	BONDAR CLEGG.VANC.	CD-1	ANTIMONY	(A.A.)	B-57	MOD2	54
3.26	BONDAR CLEGG.VANC.	CD-1	ANTIMONY	(A.A.)	B-57	MOD2	55
3.38	BONDAR CLEGG.VANC.	CD-1	ANTIMONY	(A.A.)	B-414	MOD2	56
3.36	BONDAR CLEGG.VANC.	CD-1	ANTIMONY	(A.A.)	B-414	MOD2	57
3.25	BONDAR CLEGG.VANC.	CD-1	ANTIMONY	(A.A.)	B-414	MOD2	58
3.32	BONDAR CLEGG.VANC.	CD-1	ANTIMONY	(A.A.)	B-414	MOD2	59
3.35	BONDAR CLEGG.VANC.	CD-1	ANTIMONY	(A.A.)	B-414	MOD2	60
	1					MOD2	61
LAB-12	BONDAR CLEGG, VANCOUVER					MOD2	62
3.31	BONDAR CLEGG.VANC.	CD-1	ANTIMONY	(VOL.)	B-57	MOD2	63
3.40	BONDAR CLEGG.VANC.	CD-1	ANTIMONY	(VOL.)	B-57	MOD2	64
3.34	BONDAR CLEGG.VANC.	CD-1	ANTIMONY	(VOL.)	B-57	MOD2	65
3.31	BONDAR CLEGG.VANC.	CD-1	ANTIMONY	(VOL.)	B-57	MOD2	66
3.25	BONDAR CLEGG.VANC.	CD-1	ANTIMONY	(VOL.)	B-57	MOD2	67
3.26	BONDAR CLEGG.VANC.	CD-1	ANTIMONY	(VOL.)	B-414	MOD2	68
3.28	BONDAR CLEGG.VANC.	CD-1	ANTIMONY	(VOL.)	B-414	MOD2	69
3.36	BONDAR CLEGG.VANC.	CD-1	ANTIMONY	(VOL.)	B-414	MOD2	70
3.34	BONDAR CLEGG.VANC.	CD-1	ANTIMONY	(VOL.)	B-414	MOD2	71
3.31	BONDAR CLEGG.VANC.	CD-1	ANTIMONY	(VOL.)	B-414	MOD2	72
	1					MOD2	73
LAB-13	CANMET #4, SOLUTION CHEMISTRY SECTION, CL, MSL					MOD2	74
3.59	CANMET #4	CD-1	ANTIMONY	(A.A.)	B-429	MOD2	75
3.59	CANMET #4	CD-1	ANTIMONY	(A.A.)	B-429	MOD2	76
3.60	CANMET #4	CD-1	ANTIMONY	(A.A.)	B-429	MOD2	77
3.62	CANMET #4	CD-1	ANTIMONY	(A.A.)	B-429	MOD2	78
3.53	CANMET #4	CD-1	ANTIMONY	(A.A.)	B-429	MOD2	79
3.62	CANMET #4	CD-1	ANTIMONY	(A.A.)	B-891	MOD2	80
3.63	CANMET #4	CD-1	ANTIMONY	(A.A.)	B-891	MOD2	81
3.66	CANMET #4	CD-1	ANTIMONY	(A.A.)	B-891	MOD2	82
3.67	CANMET #4	CD-1	ANTIMONY	(A.A.)	B-891	MOD2	83
3.62	CANMET #4	CD-1	ANTIMONY	(A.A.)	B-891	MOD2	84
	1					MOD2	85
LAB-14	THUNDER BAY TESTING					MOD2	86
3.40	THUNDER BAY TESTING	CD-1	ANTIMONY	(VOL.)	B-231	MOD2	87
3.47	THUNDER BAY TESTING	CD-1	ANTIMONY	(VOL.)	B-231	MOD2	88
3.53	THUNDER BAY TESTING	CD-1	ANTIMONY	(VOL.)	B-231	MOD2	89
3.47	THUNDER BAY TESTING	CD-1	ANTIMONY	(VOL.)	B-231	MOD2	90
3.45	THUNDER BAY TESTING	CD-1	ANTIMONY	(VOL.)	B-231	MOD2	91
3.42	THUNDER BAY TESTING	CD-1	ANTIMONY	(VOL.)	B-943	MOD2	92
3.51	THUNDER BAY TESTING	CD-1	ANTIMONY	(VOL.)	B-943	MOD2	93
3.48	THUNDER BAY TESTING	CD-1	ANTIMONY	(VOL.)	B-943	MOD2	94
3.44	THUNDER BAY TESTING	CD-1	ANTIMONY	(VOL.)	B-943	MOD2	95
3.41	THUNDER BAY TESTING	CD-1	ANTIMONY	(VOL.)	B-943	MOD2	96
	1					MOD2	97
LAB-15	CANMET #1, ORES AND FIRE ASSAY SECTION, CL, MSL					MOD2	98
3.59	CANMET #1	CD-1	ANTIMONY	(A.A.)	B-511	MOD2	99
3.42	CANMET #1	CD-1	ANTIMONY	(A.A.)	B-511	MOD2	100
3.55	CANMET #1	CD-1	ANTIMONY	(A.A.)	B-511	MOD2	101
3.60	CANMET #1	CD-1	ANTIMONY	(A.A.)	B-511	MOD2	102
3.58	CANMET #1	CD-1	ANTIMONY	(A.A.)	B-511	MOD2	103
3.55	CANMET #1	CD-1	ANTIMONY	(A.A.)	B-699	MOD2	104
3.62	CANMET #1	CD-1	ANTIMONY	(A.A.)	B-699	MOD2	105
3.62	CANMET #1	CD-1	ANTIMONY	(A.A.)	B-699	MOD2	106
3.62	CANMET #1	CD-1	ANTIMONY	(A.A.)	B-699	MOD2	107
3.58	CANMET #1	CD-1	ANTIMONY	(A.A.)	B-699	MOD2	108
	1					MOD2	109
	[illegible]					MOD2	110

3.72	ONT. MIN. OF RES.	CO-1	ANTIMONY	(A.A.)	B-357	MOD2	111	
3.74	ONT. MIN. OF RES.	CO-1	ANTIMONY	(A.A.)	B-357	MOD2	112	
3.72	ONT. MIN. OF RES.	CO-1	ANTIMONY	(A.A.)	B-357	MOD2	113	
3.72	ONT. MIN. OF RES.	CO-1	ANTIMONY	(A.A.)	B-357	MOD2	114	
3.69	ONT. MIN. OF RES.	CO-1	ANTIMONY	(A.A.)	B-449	MOD2	115	
3.72	ONT. MIN. OF RES.	CO-1	ANTIMONY	(A.A.)	B-449	MOD2	116	
3.48	ONT. MIN. OF RES.	CO-1	ANTIMONY	(A.A.)	B-449	MOD2	117	
3.66	ONT. MIN. OF RES.	CO-1	ANTIMONY	(A.A.)	B-449	MOD2	118	
3.72	ONT. MIN. OF RES.	CO-1	ANTIMONY	(A.A.)	B-449	MOD2	119	
3.69	ONT. MIN. OF RES.	CO-1	ANTIMONY	(A.A.)	B-449	MOD2	120	
	1					MOD3	1	
						MOD3	2	
LAB-17	LAKEFIELD RESEARCH							
3.57	LAKEFIELD RESEARCH	CO-1	ANTIMONY	(A.A.)	B-136	MOD3	3	
3.59	LAKEFIELD RESEARCH	CO-1	ANTIMONY	(A.A.)	B-136	MOD3	4	
3.59	LAKEFIELD RESEARCH	CO-1	ANTIMONY	(A.A.)	B-136	MOD3	5	
3.59	LAKEFIELD RESEARCH	CO-1	ANTIMONY	(A.A.)	B-136	MOD3	6	
3.59	LAKEFIELD RESEARCH	CO-1	ANTIMONY	(A.A.)	B-136	MOD3	7	
3.59	LAKEFIELD RESEARCH	CO-1	ANTIMONY	(A.A.)	B-372	MOD3	8	
3.59	LAKEFIELD RESEARCH	CO-1	ANTIMONY	(A.A.)	B-372	MOD3	9	
3.56	LAKEFIELD RESEARCH	CO-1	ANTIMONY	(A.A.)	B-372	MOD3	10	
3.57	LAKEFIELD RESEARCH	CO-1	ANTIMONY	(A.A.)	B-372	MOD3	11	
3.58	LAKEFIELD RESEARCH	CO-1	ANTIMONY	(A.A.)	B-372	MOD3	12	
	1					MOD3	13	
						MOD3	14	
LAB-18	CANMET #6 E. MARK							
3.62	CANMET #6	CO-1	ANTIMONY	(A.A.-1)	B-93	MOD3	15	
3.64	CANMET #6	CO-1	ANTIMONY	(A.A.-1)	B-93	MOD3	16	
3.64	CANMET #6	CO-1	ANTIMONY	(A.A.-1)	B-93	MOD3	17	
3.60	CANMET #6	CO-1	ANTIMONY	(A.A.-1)	B-93	MOD3	18	
3.60	CANMET #6	CO-1	ANTIMONY	(A.A.-1)	B-93	MOD3	19	
3.60	CANMET #6	CO-1	ANTIMONY	(A.A.-1)	B-832	MOD3	20	
3.62	CANMET #6	CO-1	ANTIMONY	(A.A.-1)	B-832	MOD3	21	
3.64	CANMET #6	CO-1	ANTIMONY	(A.A.-1)	B-832	MOD3	22	
3.60	CANMET #6	CO-1	ANTIMONY	(A.A.-1)	B-832	MOD3	23	
3.60	CANMET #6	CO-1	ANTIMONY	(A.A.-1)	B-832	MOD3	24	
	1					MOD3	25	
						MOD3	26	
LAB-18	CANMET #6 E. MARK							
3.58	CANMET #6	CO-1	ANTIMONY	(A.A.-2)	B-93	MOD3	27	
3.60	CANMET #6	CO-1	ANTIMONY	(A.A.-2)	B-93	MOD3	28	
3.60	CANMET #6	CO-1	ANTIMONY	(A.A.-2)	B-93	MOD3	29	
3.60	CANMET #6	CO-1	ANTIMONY	(A.A.-2)	B-93	MOD3	30	
3.60	CANMET #6	CO-1	ANTIMONY	(A.A.-2)	B-93	MOD3	31	
3.60	CANMET #6	CO-1	ANTIMONY	(A.A.-2)	B-832	MOD3	32	
3.60	CANMET #6	CO-1	ANTIMONY	(A.A.-2)	B-832	MOD3	33	
3.62	CANMET #6	CO-1	ANTIMONY	(A.A.-2)	B-832	MOD3	34	
3.62	CANMET #6	CO-1	ANTIMONY	(A.A.-2)	B-832	MOD3	35	
3.62	CANMET #6	CO-1	ANTIMONY	(A.A.-2)	B-832	MOD3	36	
	1					MOD3	37	
						MOD3	38	
LAB-18	CANMET #6 E. MARK							
3.62	CANMET #6	CO-1	ANTIMONY	(COLOR.)	B-93	MOD3	39	
3.63	CANMET #6	CO-1	ANTIMONY	(COLOR.)	B-93	MOD3	40	
3.59	CANMET #6	CO-1	ANTIMONY	(COLOR.)	B-93	MOD3	41	
3.61	CANMET #6	CO-1	ANTIMONY	(COLOR.)	B-93	MOD3	42	
3.61	CANMET #6	CO-1	ANTIMONY	(COLOR.)	B-93	MOD3	43	
3.65	CANMET #6	CO-1	ANTIMONY	(COLOR.)	B-832	MOD3	44	
3.61	CANMET #6	CO-1	ANTIMONY	(COLOR.)	B-832	MOD3	45	
3.64	CANMET #6	CO-1	ANTIMONY	(COLOR.)	B-832	MOD3	46	
3.61	CANMET #6	CO-1	ANTIMONY	(COLOR.)	B-832	MOD3	47	
3.59	CANMET #6	CO-1	ANTIMONY	(COLOR.)	B-832	MOD3	48	
	1					MOD4	1	
						MOD4	2	
LAB-19	CHEMEX LABS LTD.							
3.[illegible]	CHEMEX LABS LTD.	CO-1	ANTIMONY	(A.A.)	B-299	MOD4	3	
3.[illegible]	CHEMEX LABS LTD.	CO-1	ANTIMONY	(A.A.)	B-299	MOD4	4	
3.[illegible]	CHEMEX LABS LTD.	CO-1	ANTIMONY	(A.A.)	B-299	MOD4	5	
3.[illegible]	CHEMEX LABS LTD.	CO-1	ANTIMONY	(A.A.)	B-299	MOD4	6	
3.[illegible]	CHEMEX LABS LTD.	CO-1	ANTIMONY	(A.A.)	B-299	MOD4	7	
3.[illegible]	CHEMEX LABS LTD.	CO-1	ANTIMONY	(A.A.)	B-771	MOD4	8	

3.513	CHEMEX LABS LTD.	CO-1	ANTIMONY	(A.A.)	B-771	MOD4	10	
3.476	CHEMEX LABS LTD.	CO-1	ANTIMONY	(A.A.)	B-771	MOD4	11	
3.479	CHEMEX LABS LTD.	CO-1	ANTIMONY	(A.A.)	B-771	MOD4	12	
3.488	CHEMEX LABS LTD.	CO-1	ANTIMONY	(A.A.)	B-771	MOD4	13	
	1					MOD4	14	
LAB- 2	X-RAY ASSAY LABORATORIES LIMITED					MOD4	15	
3.55	X-RAY ASSAY LABS	CO-1	ANTIMONY	(XRF)	B-14	MOD4	16	
3.52	X-RAY ASSAY LABS	CO-1	ANTIMONY	(XRF)	B-14	MOD4	17	
3.60	X-RAY ASSAY LABS	CO-1	ANTIMONY	(XRF)	B-14	MOD4	18	
3.54	X-RAY ASSAY LABS	CO-1	ANTIMONY	(XRF)	B-14	MOD4	19	
3.58	X-RAY ASSAY LABS	CO-1	ANTIMONY	(XRF)	B-14	MOD4	20	
3.47	X-RAY ASSAY LABS	CO-1	ANTIMONY	(XRF)	B-1042	MOD4	21	
3.55	X-RAY ASSAY LABS	CO-1	ANTIMONY	(XRF)	B-1042	MOD4	22	
3.63	X-RAY ASSAY LABS	CO-1	ANTIMONY	(XRF)	B-1042	MOD4	23	
3.62	X-RAY ASSAY LABS	CO-1	ANTIMONY	(XRF)	B-1042	MOD4	24	
	2					SC	25	
	STANDARD REFERENCE MATERIAL CO-1. ARSENIC					AS	2	
AS CONCENTRATION (%)						AS	3	
LAB- 1	LORING LABS					AS	4	
.65	LORING LABS	CO-1	ARSENIC	(VOL.)	B-504	AS	5	
.62	LORING LABS	CO-1	ARSENIC	(VOL.)	B-504	AS	6	
.67	LORING LABS	CO-1	ARSENIC	(VOL.)	B-504	AS	7	
.67	LORING LABS	CO-1	ARSENIC	(VOL.)	B-504	AS	8	
.67	LORING LABS	CO-1	ARSENIC	(VOL.)	B-504	AS	9	
.67	LORING LABS	CO-1	ARSENIC	(VOL.)	B-1024	AS	10	
.67	LORING LABS	CO-1	ARSENIC	(VOL.)	B-1024	AS	11	
.67	LORING LABS	CO-1	ARSENIC	(VOL.)	B-1024	AS	12	
.67	LORING LABS	CO-1	ARSENIC	(VOL.)	B-1024	AS	13	
.67	LORING LABS	CO-1	ARSENIC	(VOL.)	B-1024	AS	14	
	1					AS	15	
LAB- 2	SHERRITT GORDON, FORT SASKATCHEWAN, ALBERTA					AS	16	
.603	SHERRITT GORDON-ALB	CO-1	ARSENIC	(COLOR.)	B-807	AS	17	
.633	SHERRITT GORDON-ALB	CO-1	ARSENIC	(COLOR.)	B-807	AS	18	
.631	SHERRITT GORDON-ALB	CO-1	ARSENIC	(COLOR.)	B-807	AS	19	
.613	SHERRITT GORDON-ALB	CO-1	ARSENIC	(COLOR.)	B-807	AS	20	
.618	SHERRITT GORDON-ALB	CO-1	ARSENIC	(COLOR.)	B-807	AS	21	
.635	SHERRITT GORDON-ALB	CO-1	ARSENIC	(COLOR.)	B-1025	AS	22	
.642	SHERRITT GORDON-ALB	CO-1	ARSENIC	(COLOR.)	B-1025	AS	23	
.634	SHERRITT GORDON-ALB	CO-1	ARSENIC	(COLOR.)	B-1025	AS	24	
.613	SHERRITT GORDON-ALB	CO-1	ARSENIC	(COLOR.)	B-1025	AS	25	
.636	SHERRITT GORDON-ALB	CO-1	ARSENIC	(COLOR.)	B-1025	AS	26	
	1					AS	27	
LAB- 3	HUDSON BAY MINING AND SMELTING					AS	28	
.64	HUDSON BAY	CO-1	ARSENIC	(A.A.)	B-222	AS	29	
.64	HUDSON BAY	CO-1	ARSENIC	(A.A.)	B-222	AS	30	
.65	HUDSON BAY	CO-1	ARSENIC	(A.A.)	B-222	AS	31	
.64	HUDSON BAY	CO-1	ARSENIC	(A.A.)	B-222	AS	32	
.66	HUDSON BAY	CO-1	ARSENIC	(A.A.)	B-222	AS	33	
.65	HUDSON BAY	CO-1	ARSENIC	(A.A.)	B-381	AS	34	
.64	HUDSON BAY	CO-1	ARSENIC	(A.A.)	B-381	AS	35	
.66	HUDSON BAY	CO-1	ARSENIC	(A.A.)	B-381	AS	36	
.65	HUDSON BAY	CO-1	ARSENIC	(A.A.)	B-381	AS	37	
.66	HUDSON BAY	CO-1	ARSENIC	(A.A.)	B-381	AS	38	
	1					AS	39	
LAB- 3	HUDSON BAY MINING AND SMELTING					AS	40	
.61	HUDSON BAY	CO-1	ARSENIC	(VOL.)	B-222	AS	41	
.69	HUDSON BAY	CO-1	ARSENIC	(VOL.)	B-222	AS	42	
.67	HUDSON BAY	CO-1	ARSENIC	(VOL.)	B-222	AS	43	
.71	HUDSON BAY	CO-1	ARSENIC	(VOL.)	B-222	AS	44	
.71	HUDSON BAY	CO-1	ARSENIC	(VOL.)	B-222	AS	45	
.65	HUDSON BAY	CO-1	ARSENIC	(VOL.)	B-381	AS	46	
.71	HUDSON BAY	CO-1	ARSENIC	(VOL.)	B-381	AS	47	
.74	HUDSON BAY	CO-1	ARSENIC	(VOL.)	B-381	AS	48	
.71	HUDSON BAY	CO-1	ARSENIC	(VOL.)	B-381	AS	49	

							AS	51
							AS	52
LAB- 6 CANMET #2 (C.J. SMITH)								
.510	CANMET NO. 2	CO-1	ARSENIC	(POLAR.)	B-394		AS	53
.521	CANMET NO. 2	CO-1	ARSENIC	(POLAR.)	B-394		AS	54
.529	CANMET NO. 2	CO-1	ARSENIC	(POLAR.)	B-394		AS	55
.540	CANMET NO. 2	CO-1	ARSENIC	(POLAR.)	B-394		AS	56
.553	CANMET NO. 2	CO-1	ARSENIC	(POLAR.)	B-394		AS	57
.562	CANMET NO. 2	CO-1	ARSENIC	(POLAR.)	B-959		AS	58
.574	CANMET NO. 2	CO-1	ARSENIC	(POLAR.)	B-959		AS	59
.584	CANMET NO. 2	CO-1	ARSENIC	(POLAR.)	B-959		AS	60
.596	CANMET NO. 2	CO-1	ARSENIC	(POLAR.)	B-959		AS	61
.606	CANMET NO. 2	CO-1	ARSENIC	(POLAR.)	B-959		AS	62
							AS	63
							AS	64
LAB- 4 CANMET #2 (C.J. SMITH)								
.621	CANMET NO. 2	CO-1	ARSENIC	(AMP.)	B-394		AS	65
.633	CANMET NO. 2	CO-1	ARSENIC	(AMP.)	B-394		AS	66
.646	CANMET NO. 2	CO-1	ARSENIC	(AMP.)	B-394		AS	67
.655	CANMET NO. 2	CO-1	ARSENIC	(AMP.)	B-394		AS	68
.665	CANMET NO. 2	CO-1	ARSENIC	(AMP.)	B-394		AS	69
.679	CANMET NO. 2	CO-1	ARSENIC	(AMP.)	B-959		AS	70
.694	CANMET NO. 2	CO-1	ARSENIC	(AMP.)	B-959		AS	71
.705	CANMET NO. 2	CO-1	ARSENIC	(AMP.)	B-959		AS	72
.714	CANMET NO. 2	CO-1	ARSENIC	(AMP.)	B-959		AS	73
.729	CANMET NO. 2	CO-1	ARSENIC	(AMP.)	B-959		AS	74
							AS	75
							AS	76
LAB- 5 CANMET #3 (SPECTROCHEMISTRY)								
.597	CANMET NO. 3	CO-1	ARSENIC	(XRF)	B-927		AS	77
.613	CANMET NO. 3	CO-1	ARSENIC	(XRF)	B-927		AS	78
.624	CANMET NO. 3	CO-1	ARSENIC	(XRF)	B-927		AS	79
.636	CANMET NO. 3	CO-1	ARSENIC	(XRF)	B-927		AS	80
.654	CANMET NO. 3	CO-1	ARSENIC	(XRF)	B-927		AS	81
.670	CANMET NO. 3	CO-1	ARSENIC	(XRF)	B-1029		AS	82
.684	CANMET NO. 3	CO-1	ARSENIC	(XRF)	B-1029		AS	83
.694	CANMET NO. 3	CO-1	ARSENIC	(XRF)	B-1029		AS	84
.708	CANMET NO. 3	CO-1	ARSENIC	(XRF)	B-1029		AS	85
.720	CANMET NO. 3	CO-1	ARSENIC	(XRF)	B-1029		AS	86
							AS	87
							AS	88
LAB- 4 INCO. COPPER CLIFF								
.474	INCO. COPPER CLIFF	CO-1	ARSENIC	(COLOR.)	B-63		AS	89
.490	INCO. COPPER CLIFF	CO-1	ARSENIC	(COLOR.)	B-63		AS	90
.499	INCO. COPPER CLIFF	CO-1	ARSENIC	(COLOR.)	B-63		AS	91
.667	INCO. COPPER CLIFF	CO-1	ARSENIC	(COLOR.)	B-63		AS	92
.669	INCO. COPPER CLIFF	CO-1	ARSENIC	(COLOR.)	B-63		AS	93
.684	INCO. COPPER CLIFF	CO-1	ARSENIC	(COLOR.)	B-577		AS	94
.696	INCO. COPPER CLIFF	CO-1	ARSENIC	(COLOR.)	B-577		AS	95
.707	INCO. COPPER CLIFF	CO-1	ARSENIC	(COLOR.)	B-577		AS	96
.720	INCO. COPPER CLIFF	CO-1	ARSENIC	(COLOR.)	B-577		AS	97
.735	INCO. COPPER CLIFF	CO-1	ARSENIC	(COLOR.)	B-577		AS	98
							MOD1	23
							MOD1	24
LAB- 7 ELSIE DONALDSON. CANMET								
.447	E. DONALDSON.CANMET	CO-1	ARSENIC	(COLOR.)	B-567		MOD1	25
.460	E. DONALDSON.CANMET	CO-1	ARSENIC	(COLOR.)	B-567		MOD1	26
.482	E. DONALDSON.CANMET	CO-1	ARSENIC	(COLOR.)	B-567		MOD1	27
.501	E. DONALDSON.CANMET	CO-1	ARSENIC	(COLOR.)	B-567		MOD1	28
.525	E. DONALDSON.CANMET	CO-1	ARSENIC	(COLOR.)	B-567		MOD1	29
.552	E. DONALDSON.CANMET	CO-1	ARSENIC	(COLOR.)	B-933		MOD1	30
.580	E. DONALDSON.CANMET	CO-1	ARSENIC	(COLOR.)	B-933		MOD1	31
.602	E. DONALDSON.CANMET	CO-1	ARSENIC	(COLOR.)	B-933		MOD1	32
.630	E. DONALDSON.CANMET	CO-1	ARSENIC	(COLOR.)	B-933		MOD1	33
.652	E. DONALDSON.CANMET	CO-1	ARSENIC	(COLOR.)	B-933		MOD1	34
							MOD1	35
							MOD1	36
LAB- 8 CENTRE DE RECHERCHES MINERALES (CURREC)								
.53	C.R.M. (CURREC)	CO-1	ARSENIC	(VOL.)	B-532		MOD1	37
.58	C.R.M. (CURREC)	CO-1	ARSENIC	(VOL.)	B-532		MOD1	38
.67	C.R.M. (CURREC)	CO-1	ARSENIC	(VOL.)	B-532		MOD1	39

.62	C.R.M. (QUEBEC)	CD-1	ARSENIC	(VOL.)	B-585	MOD1	42
.63	C.R.M. (QUEBEC)	CD-1	ARSENIC	(VOL.)	B-585	MOD1	43
.64	C.R.M. (QUEBEC)	CD-1	ARSENIC	(VOL.)	B-585	MOD1	44
.63	C.R.M. (QUEBEC)	CD-1	ARSENIC	(VOL.)	B-585	MOD1	45
.65	C.R.M. (QUEBEC)	CD-1	ARSENIC	(VOL.)	B-585	MOD1	46
	1					MOD2	121
LAB-9	BONDAR CLEGG, OTTAWA					MOD2	122
.652	BONDAR CLEGG.OTTAWA	CD-1	ARSENIC	(VOL.)	B-365	MOD2	123
.674	BONDAR CLEGG.OTTAWA	CD-1	ARSENIC	(VOL.)	B-365	MOD2	124
.654	BONDAR CLEGG.OTTAWA	CD-1	ARSENIC	(VOL.)	B-365	MOD2	125
.646	BONDAR CLEGG.OTTAWA	CD-1	ARSENIC	(VOL.)	B-365	MOD2	126
.671	BONDAR CLEGG.OTTAWA	CD-1	ARSENIC	(VOL.)	B-365	MOD2	127
.654	BONDAR CLEGG.OTTAWA	CD-1	ARSENIC	(VOL.)	B-1262	MOD2	128
.653	BONDAR CLEGG.OTTAWA	CD-1	ARSENIC	(VOL.)	B-1262	MOD2	129
.656	BONDAR CLEGG.OTTAWA	CD-1	ARSENIC	(VOL.)	B-1262	MOD2	130
.665	BONDAR CLEGG.OTTAWA	CD-1	ARSENIC	(VOL.)	B-1262	MOD2	131
.673	BONDAR CLEGG.OTTAWA	CD-1	ARSENIC	(VOL.)	B-1262	MOD2	132
	1					MOD2	133
LAB-10	GWEN ASLIN, GSC					MOD2	134
.62	G. ASLIN. GSC	CD-1	ARSENIC	(A.A.)	B-758	MOD2	135
.59	G. ASLIN. GSC	CD-1	ARSENIC	(A.A.)	B-758	MOD2	136
.61	G. ASLIN. GSC	CD-1	ARSENIC	(A.A.)	B-758	MOD2	137
.56	G. ASLIN. GSC	CD-1	ARSENIC	(A.A.)	B-758	MOD2	138
.59	G. ASLIN. GSC	CD-1	ARSENIC	(A.A.)	B-758	MOD2	139
.56	G. ASLIN. GSC	CD-1	ARSENIC	(A.A.)	B-1005	MOD2	140
.62	G. ASLIN. GSC	CD-1	ARSENIC	(A.A.)	B-1005	MOD2	141
.61	G. ASLIN. GSC	CD-1	ARSENIC	(A.A.)	B-1005	MOD2	142
.57	G. ASLIN. GSC	CD-1	ARSENIC	(A.A.)	B-1005	MOD2	143
.59	G. ASLIN. GSC	CD-1	ARSENIC	(A.A.)	B-1005	MOD2	144
	1					MOD2	145
LAB-11	COMINCO #1					MOD2	146
.69	COMINCO #1	CD-1	ARSENIC	(VOL.)	B-210	MOD2	147
.69	COMINCO #1	CD-1	ARSENIC	(VOL.)	B-210	MOD2	148
.70	COMINCO #1	CD-1	ARSENIC	(VOL.)	B-210	MOD2	149
.68	COMINCO #1	CD-1	ARSENIC	(VOL.)	B-210	MOD2	150
.69	COMINCO #1	CD-1	ARSENIC	(VOL.)	B-210	MOD2	151
.70	COMINCO #1	CD-1	ARSENIC	(VOL.)	B-1109	MOD2	152
.69	COMINCO #1	CD-1	ARSENIC	(VOL.)	B-1109	MOD2	153
.68	COMINCO #1	CD-1	ARSENIC	(VOL.)	B-1109	MOD2	154
.70	COMINCO #1	CD-1	ARSENIC	(VOL.)	B-1109	MOD2	155
.68	COMINCO #1	CD-1	ARSENIC	(VOL.)	B-1109	MOD2	156
	1					MOD2	157
LAB-11	COMINCO #2					MOD2	158
.71	COMINCO #2	CD-1	ARSENIC	(VOL.)	B-210	MOD2	159
.71	COMINCO #2	CD-1	ARSENIC	(VOL.)	B-210	MOD2	160
.70	COMINCO #2	CD-1	ARSENIC	(VOL.)	B-210	MOD2	161
.70	COMINCO #2	CD-1	ARSENIC	(VOL.)	B-210	MOD2	162
.70	COMINCO #2	CD-1	ARSENIC	(VOL.)	B-210	MOD2	163
.70	COMINCO #2	CD-1	ARSENIC	(VOL.)	B-1109	MOD2	164
.70	COMINCO #2	CD-1	ARSENIC	(VOL.)	B-1109	MOD2	165
.69	COMINCO #2	CD-1	ARSENIC	(VOL.)	B-1109	MOD2	166
.70	COMINCO #2	CD-1	ARSENIC	(VOL.)	B-1109	MOD2	167
.70	COMINCO #2	CD-1	ARSENIC	(VOL.)	B-1109	MOD2	168
	1					MOD2	169
LAB-12	BONDAR CLEGG, VANCOUVER					MOD2	170
.663	BONDAR CLEGG.VANC.	CD-1	ARSENIC	(VOL.)	B-57	MOD2	171
.655	BONDAR CLEGG.VANC.	CD-1	ARSENIC	(VOL.)	B-57	MOD2	172
.663	BONDAR CLEGG.VANC.	CD-1	ARSENIC	(VOL.)	B-57	MOD2	173
.655	BONDAR CLEGG.VANC.	CD-1	ARSENIC	(VOL.)	B-57	MOD2	174
.673	BONDAR CLEGG.VANC.	CD-1	ARSENIC	(VOL.)	B-57	MOD2	175
.673	BONDAR CLEGG.VANC.	CD-1	ARSENIC	(VOL.)	B-414	MOD2	176
.654	BONDAR CLEGG.VANC.	CD-1	ARSENIC	(VOL.)	B-414	MOD2	177
.672	BONDAR CLEGG.VANC.	CD-1	ARSENIC	(VOL.)	B-414	MOD2	178
.674	BONDAR CLEGG.VANC.	CD-1	ARSENIC	(VOL.)	B-414	MOD2	179
	BONDAR CLEGG.VANC.	CD-1	ARSENIC	(VOL.)	B-414	MOD2	180

	1					MOD2	181
LAB-13	CANMET #4 A.D. KING					MOD3	49
.736	CANMET #4	CD-1	ARSENIC	(VOL.)	B-429	MOD3	50
.696	CANMET #4	CD-1	ARSENIC	(VOL.)	B-429	MOD3	51
.694	CANMET #4	CD-1	ARSENIC	(VOL.)	B-429	MOD3	52
.684	CANMET #4	CD-1	ARSENIC	(VOL.)	B-429	MOD3	53
.696	CANMET #4	CD-1	ARSENIC	(VOL.)	B-429	MOD3	54
.703	CANMET #4	CD-1	ARSENIC	(VOL.)	B-691	MOD3	55
.699	CANMET #4	CD-1	ARSENIC	(VOL.)	B-691	MOD3	56
.697	CANMET #4	CD-1	ARSENIC	(VOL.)	B-691	MOD3	57
.702	CANMET #4	CD-1	ARSENIC	(VOL.)	B-691	MOD3	58
.699	CANMET #4	CD-1	ARSENIC	(VOL.)	B-691	MOD3	59
	1					MOD3	60
LAB-14	THUNDER BAY TESTING					MOD2	182
.561	THUNDER BAY TESTING	CD-1	ARSENIC	(VOL.)	B-231	MOD2	183
.578	THUNDER BAY TESTING	CD-1	ARSENIC	(VOL.)	B-231	MOD2	184
.566	THUNDER BAY TESTING	CD-1	ARSENIC	(VOL.)	B-231	MOD2	185
.572	THUNDER BAY TESTING	CD-1	ARSENIC	(VOL.)	B-231	MOD2	186
.564	THUNDER BAY TESTING	CD-1	ARSENIC	(VOL.)	B-231	MOD2	187
.572	THUNDER BAY TESTING	CD-1	ARSENIC	(VOL.)	B-943	MOD2	188
.569	THUNDER BAY TESTING	CD-1	ARSENIC	(VOL.)	B-943	MOD2	189
.568	THUNDER BAY TESTING	CD-1	ARSENIC	(VOL.)	B-943	MOD2	190
.577	THUNDER BAY TESTING	CD-1	ARSENIC	(VOL.)	B-943	MOD2	191
.567	THUNDER BAY TESTING	CD-1	ARSENIC	(VOL.)	B-943	MOD2	192
	1					MOD2	193
LAB-15	CANMET #1, ORES AND FIRE ASSAY SECTION, CL. MSL					MOD2	194
.697	CANMET #1	CD-1	ARSENIC	(VOL.)	B-511	MOD2	195
.736	CANMET #1	CD-1	ARSENIC	(VOL.)	B-511	MOD2	196
.736	CANMET #1	CD-1	ARSENIC	(VOL.)	B-511	MOD2	197
.736	CANMET #1	CD-1	ARSENIC	(VOL.)	B-511	MOD2	198
.697	CANMET #1	CD-1	ARSENIC	(VOL.)	B-511	MOD2	199
.697	CANMET #1	CD-1	ARSENIC	(VOL.)	B-699	MOD2	200
.736	CANMET #1	CD-1	ARSENIC	(VOL.)	B-699	MOD2	201
.736	CANMET #1	CD-1	ARSENIC	(VOL.)	B-699	MOD2	202
.697	CANMET #1	CD-1	ARSENIC	(VOL.)	B-699	MOD2	203
.736	CANMET #1	CD-1	ARSENIC	(VOL.)	B-699	MOD2	204
	1					MOD2	205
LAB-15	CANMET #1, ORES AND FIRE ASSAY SECTION, CL. MSL					MOD2	206
.673	CANMET #1	CD-1	ARSENIC	(COLOR.)	B-511	MOD2	207
.635	CANMET #1	CD-1	ARSENIC	(COLOR.)	B-511	MOD2	208
.655	CANMET #1	CD-1	ARSENIC	(COLOR.)	B-511	MOD2	209
.663	CANMET #1	CD-1	ARSENIC	(COLOR.)	B-511	MOD2	210
.650	CANMET #1	CD-1	ARSENIC	(COLOR.)	B-511	MOD2	211
.610	CANMET #1	CD-1	ARSENIC	(COLOR.)	B-699	MOD2	212
.655	CANMET #1	CD-1	ARSENIC	(COLOR.)	B-699	MOD2	213
.650	CANMET #1	CD-1	ARSENIC	(COLOR.)	B-699	MOD2	214
.678	CANMET #1	CD-1	ARSENIC	(COLOR.)	B-699	MOD2	215
.655	CANMET #1	CD-1	ARSENIC	(COLOR.)	B-699	MOD2	216
	1					MOD2	217
LAB-16	ONTARIO MINISTRY OF NATURAL RESOURCES					MOD2	218
.71	ONT. MIN. OF RES.	CD-1	ARSENIC	(COLOR.)	B-357	MOD2	219
.66	ONT. MIN. OF RES.	CD-1	ARSENIC	(COLOR.)	B-357	MOD2	220
.63	ONT. MIN. OF RES.	CD-1	ARSENIC	(COLOR.)	B-357	MOD2	221
.65	ONT. MIN. OF RES.	CD-1	ARSENIC	(COLOR.)	B-357	MOD2	222
.65	ONT. MIN. OF RES.	CD-1	ARSENIC	(COLOR.)	B-357	MOD2	223
.68	ONT. MIN. OF RES.	CD-1	ARSENIC	(COLOR.)	B-449	MOD2	224
.70	ONT. MIN. OF RES.	CD-1	ARSENIC	(COLOR.)	B-449	MOD2	225
.55	ONT. MIN. OF RES.	CD-1	ARSENIC	(COLOR.)	B-449	MOD2	226
.69	ONT. MIN. OF RES.	CD-1	ARSENIC	(COLOR.)	B-449	MOD2	227
.71	ONT. MIN. OF RES.	CD-1	ARSENIC	(COLOR.)	B-449	MOD2	228
	1					MOD3	61
LAB-17	LAKEFIELD RESEARCH					MOD3	62
.584	LAKEFIELD RESEARCH	CD-1	ARSENIC	(VOL.)	B-136	MOD3	63
.545	LAKEFIELD RESEARCH	CD-1	ARSENIC	(VOL.)	B-136	MOD3	64

692	LAKEFIELD RESEARCH	CO-1	ARSENIC	(VOL.)	B-372	MOD3	68	
693	LAKEFIELD RESEARCH	CO-1	ARSENIC	(VOL.)	B-372	MOD3	69	
694	LAKEFIELD RESEARCH	CO-1	ARSENIC	(VOL.)	B-372	MOD3	70	
699	LAKEFIELD RESEARCH	CO-1	ARSENIC	(VOL.)	B-372	MOD3	71	
699	LAKEFIELD RESEARCH	CO-1	ARSENIC	(VOL.)	B-372	MOD3	72	
1						MOD4	25	
AB-19 CHEMEX LABS LTD.						MOD4	26	
693	CHEMEX LABS LTD.	CO-1	ARSENIC	(VOL.)	B-299	MOD4	27	
701	CHEMEX LABS LTD.	CO-1	ARSENIC	(VOL.)	B-299	MOD4	28	
683	CHEMEX LABS LTD.	CO-1	ARSENIC	(VOL.)	B-299	MOD4	29	
697	CHEMEX LABS LTD.	CO-1	ARSENIC	(VOL.)	B-299	MOD4	30	
697	CHEMEX LABS LTD.	CO-1	ARSENIC	(VOL.)	B-299	MOD4	31	
705	CHEMEX LABS LTD.	CO-1	ARSENIC	(VOL.)	B-771	MOD4	32	
695	CHEMEX LABS LTD.	CO-1	ARSENIC	(VOL.)	B-771	MOD4	33	
700	CHEMEX LABS LTD.	CO-1	ARSENIC	(VOL.)	B-771	MOD4	34	
694	CHEMEX LABS LTD.	CO-1	ARSENIC	(VOL.)	B-771	MOD4	35	
702	CHEMEX LABS LTD.	CO-1	ARSENIC	(VOL.)	B-771	MOD4	36	
1						MOD4	37	
AB-20 X-RAY ASSAY LABORATORIES LIMITED						MOD4	38	
68	X-RAY ASSAY LABS	CO-1	ARSENIC	(XRF)	B-14	MOD4	39	
66	X-RAY ASSAY LABS	CO-1	ARSENIC	(XRF)	B-14	MOD4	40	
66	X-RAY ASSAY LABS	CO-1	ARSENIC	(XRF)	B-14	MOD4	41	
65	X-RAY ASSAY LABS	CO-1	ARSENIC	(XRF)	B-14	MOD4	42	
67	X-RAY ASSAY LABS	CO-1	ARSENIC	(XRF)	B-14	MOD4	43	
65	X-RAY ASSAY LABS	CO-1	ARSENIC	(XRF)	B-1042	MOD4	44	
65	X-RAY ASSAY LABS	CO-1	ARSENIC	(XRF)	B-1042	MOD4	45	
65	X-RAY ASSAY LABS	CO-1	ARSENIC	(XRF)	B-1042	MOD4	46	
65	X-RAY ASSAY LABS	CO-1	ARSENIC	(XRF)	B-1042	MOD4	47	
65	X-RAY ASSAY LABS	CO-1	ARSENIC	(XRF)	B-1042	MOD4	48	
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